

KIRTLANDIA

The Cleveland Museum of Natural History

December 1999

Number 51:1-2

SONJA E. TERAGUCHI (1941-1998)



You can't do science unless you have a mania for it. It takes so much work, you can't just do it nine to five; you have to put your body and soul into it. How far you get, how deep you get, how comprehensive your problem solving is — all of these depend on whether you're immersed in it.

Sonja Teraguchi (1997, p. 393)

Dr. Sonja Teraguchi was an entomologist and respected senior curator at The Cleveland Museum of Natural History. At the time of her death she was actively involved with a number of educational, curatorial, and scientific projects, notably a long-term study of the moth populations of northeastern Ohio. She also was a forceful local advocate for the preservation of the world's biological diversity.

Sonja Teraguchi was born in Kamloops, in southern British Columbia. Her life was influenced by the time she spent at her family's fishing camp on Shuswap Lake, where she became interested in nature. An interest in

entomology blossomed while she was an undergraduate student at the University of British Columbia. She majored in zoology, a field which she loved, as well as mathematics, a field that she pursued because of an influential high school teacher. Sonja obtained a bachelor's degree in zoology and mathematics in 1962, and was awarded a master's degree in zoology in 1964, from the University of British Columbia. She subsequently received a Ph.D. in zoology from the University of Wisconsin in 1972.

Sonja accompanied her husband, biologist Mitsuo Teraguchi, to Cleveland in 1970, and began work at Case Western Reserve University, first as a lecturer, and then as an assistant professor. She obtained a position at The Cleveland Museum of Natural History in 1974. Sonja would remain affiliated with Case Western Reserve as an adjunct faculty member until her death, but the heart of her work was at the Museum where she served as Curator of Invertebrate Zoology and was directly in charge of collections of insects, shells, and other invertebrates.

Dr. Teraguchi cared deeply about the Museum and its staff. She was administrative head of the curatorial division of the Museum in the 1980s. As such, she supervised the expansion of the curatorial staff and research collections, as well as the construction of additional space to house parts of the collections. Sonja spearheaded the computerization of the biological collections of the Museum, obtaining grants to fund the Museum's biological records program and working on various aspects of the program herself. She also served as a mentor to a number of young curators. Sonja worked on various exhibits as part of her duties at the Museum. At the time of her death, she had just completed work on an exhibit on organisms introduced into North America, including the European honeybee. This proved to be a great effort, and necessitated setting up honeybee colonies in her yard to supply bees for the live exhibit. This project stimulated an interest in apiculture.

Sonja was also an expert in forensic entomology, acting as a *pro bono* consultant for the Cuyahoga County Coroner's office. Her work included the identification of insects found on corpses and the training of police officers in the collection of these insects. She also consulted

on a wide variety of entomological projects, using any funds generated to subsidize her research program. Sonja was very generous with her time, fielding a great number of telephone questions from the general public, responding to numerous inquiries from members of the media, and examining a great number of insects and arachnids that arrived at the Museum in jars of all sizes.

Sonja took a great interest in students. She was instrumental in the formation of the Adopt-A-Student program at the Museum in 1980. That program, sponsored by the Kirtlandia Society, gives undergraduate students the opportunity to spend summers working on research projects with Museum curators. She spent a great deal of time administering this program, to the benefit of many students as well as most of the Museum's curators. During the last year of her life she had been active with what would ultimately be a successful effort to raise an endowment to help support the Adopt-A-Student Program.

Dr. Teraguchi was an advocate for the preservation of the world's biological diversity. Her efforts were primarily on the local level. They included her co-founding of the rainforest committee of the Northeast Ohio chapter of the Sierra Club and helping to organize conferences supported by the chapter. She also served on the Advisory Committee of the Earth Day Coalition.

Sonja was an active member of the Mentor Marsh Board of Management. She was also on the Nongame and Endangered Species Technical Advisory Committee of the Division of Wildlife of the Ohio Department of Natural Resources as well as the Ohio Gypsy Moth Management Council of the Ohio Department of Agriculture.

In the 1970s and 1980s, Dr. Teraguchi published on the negative buoyancy of the larva of the dipteran *Chaoborus americanus* (her thesis topic), the migration patterns and local movements of leafhoppers, and other topics. Her research program at the Museum initially focused on leafhoppers. By the end of the 1980s she began to turn most of her attention to butterflies and, especially, moths. She submitted a number of reports regarding gypsy moths and the preservation of biodiversity in Ohio to the Ohio Division of Wildlife and the Ohio Department of Agriculture.

During the past 13 years a great deal of Dr. Teraguchi's time was taken up with a long-term study of moths in northeastern Ohio. The study encompassed a number of sites in the watershed of the Grand River, many of these sites within The Cleveland Museum of Natural History's system of preserves. Her hope was that the long time frame of this study would allow for a mathematical analysis of these moth populations. She was also interested in what would happen to the native moth populations as the gypsy moth moved into this region, and what effect pesticides used to fight the gypsy moth would have on other species of moths. She was especially interested in the

effects of *Bacillus thuringiensis* on these nontarget moths. Sonja enlisted the aid of many students, including a number of students in the Adopt-A-Student program, and a core of dedicated volunteers to help with the herculean task of trapping, identifying, and curating some 45,000 moths per year. She insisted that her many specimens be properly curated so that they would be available to workers in the future. She also hoped that her work would eventually help planners make wise and informed decisions that would lead to the protection of moth species.

In recent years, Sonja had been helping to establish a long-term project monitoring Ohio's butterflies. This effort was patterned after a butterfly monitoring project in Great Britain. Through the efforts of Sonja and her colleagues, and with support of the Ohio Lepidopterists and the State of Ohio, 19 butterfly monitoring sites had been set up by 1998. It was intended that the data from these surveys would help to reveal the reasons for decline in various butterfly species. The project is ongoing.

Dr. Teraguchi was an associate editor of this journal. She was also the staff liaison to the Kirtlandia Society, which provides partial funding for this journal. In addition, Dr. Teraguchi served on the Editorial Committee of the Ohio Biological Survey and as a reviewer for the *Annals of the Entomological Society of America*.

Those interested in finding out more about Dr. Teraguchi's life should read her first-person account (Teraguchi, 1997), published in *Journeys of Women in Science and Engineering*. Although a modest person, she did take pride in having her biography included in this book, as she felt it could influence young women to pursue careers in the sciences. As her poignant words show, she was also very proud of being able to maintain a family and successfully raise two daughters while engaged in an intensive career in science. Of course, this did necessitate taking her daughters to the Museum to sort moths upon occasion! Her daughters are now grown. Sonja's husband, Mitsuo, died in 1991.

The six papers by S. Teraguchi and K. Lublin in this issue of *Kirtlandia* present only a portion of the data accumulated during Dr. Teraguchi's long-term moth study. These papers reflect the specimens and data collected during five years (1988–1992) of the study. All of the papers had passed through the review process shortly before Dr. Teraguchi's untimely death at the age of 57 in December of 1998. This issue of *Kirtlandia*, which includes six of the most comprehensive papers ever written on the moths of northeastern Ohio, stands as a memorial to her.

J. Hannibal

Reference

- Teraguchi, S. 1997. Sonja Teraguchi, p. 390-394. In S. A. Ambrose, K. L. Dunke, B. B. Lazarus, I. Nair, and D. A. Harkus, *Journeys of Women in Science and Engineering: No Universal Constants*. Philadelphia, Temple University Press.